



# Indoor Location Solutions

## Seamless Indoor to Outdoor

### About the Indoor Location Platform

Precise seamless indoor/outdoor positioning and assistance data services are provided by the IoT Location Platform (ILP) from Location Studio® globally for any IoT application. Developed specifically to support the needs of low-energy devices and multi-network communications, the ILP solution delivers telco-grade performance in an over-the-top (OTT) architecture.



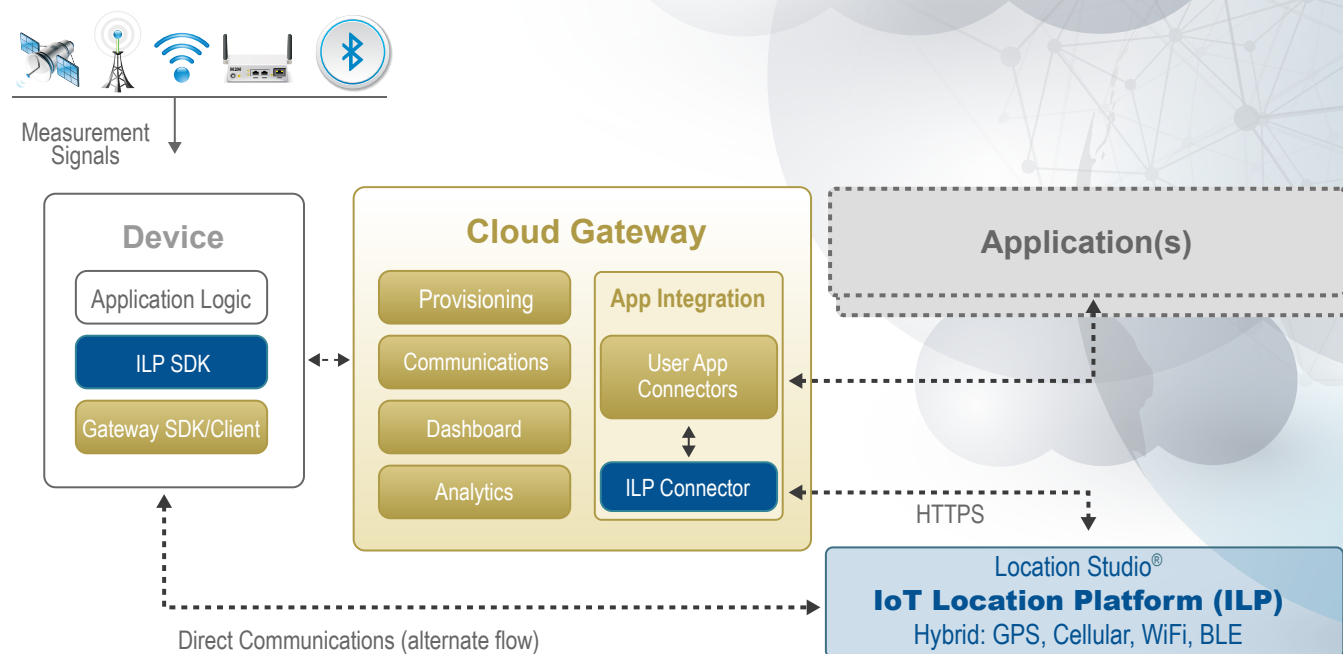
## Worldwide IoT Location Done Right

| Over-the-Top                                                                                                | Power                                                                                                          | Accuracy                                                                                                                           | Coverage                                                                                                                                             | Privacy                                                                               |
|-------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Enables precise location across any platform independent of hardware, operating system, and transport layer | A-GNSS solution enables not only lower power GPS, but deterministic power modeling over the life of the device | Indoor Positioning Solution (using passive WiFi) enables sub-10 meter accuracy in most enterprise environments (no add'l hardware) | Global coverage across all air interfaces (2G, 3G, 4G, WiFi, BLE), environments (indoor/outdoor, urban/suburban/rural), and regions (China, EU, ROW) | You and your customers retain data control; Comtech keeps the data private and secure |

## Cloud-Based Solution Architecture

ILP delivers location and GNSS assistance services from the cloud. The services are highly-scalable and robust supporting even the largest positioning applications.

With multi-protocol support, ILP is readily integrated into many popular IoT Cloud Gateway solutions and can also communicate directly with the IoT device as needed, using a highly efficient, binary payload protocol.



The ILP SDK provides multi-language (C, C++, and Java) tools, examples, and libraries to accelerate integration and implementation.



# Seamless Indoor and Outdoor Positioning

## One API for all environments

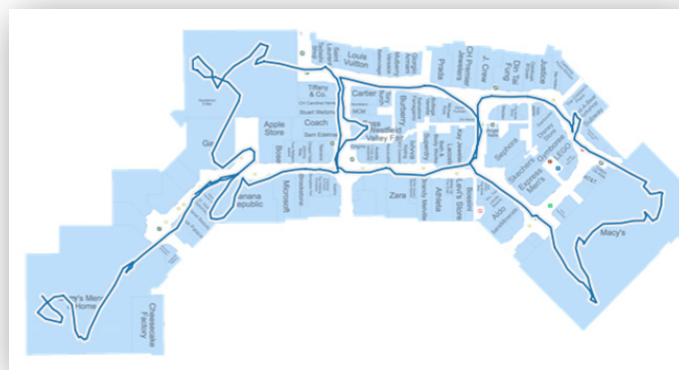
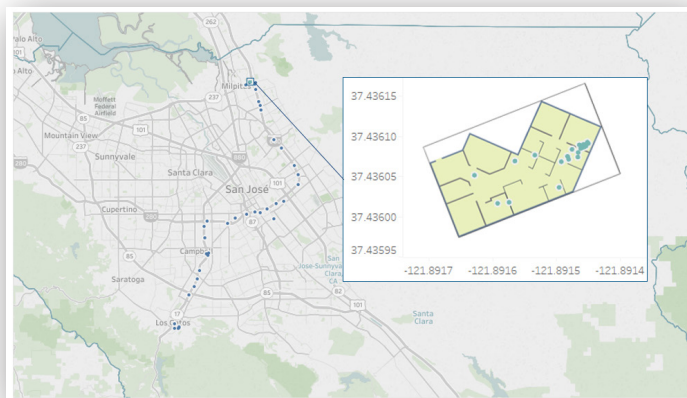
- Precise indoor location services seamlessly merged with traditional outdoor location technologies
- Existing ILP solutions benefit with precise positioning when indoor data is available
- Automatically utilizes world-wide cellular, WiFi, and BLE data when precise positioning not available

## Low cost deployment and maintenance

- Utilizes signals from your existing wireless network without the need for additional hardware
- Adaptable for different environments and applications
- Precise positioning at a lower cost of operation (minimal CAPEX)

## Value-added services

- Minimize search time for location
- Collect data enabling analytics
- Function across platforms and operating systems





## For more information:

Location Studio Developer Portal:

- [//developer.location.studio](https://developer.location.studio)

ILP Services and Tools

- ILP APIs
- [//developer.location.studio/site/docs/position-suite/](https://developer.location.studio/site/docs/position-suite/)

- ILP Embedded SDK
- [//git.location.studio/location.studio/ilpsdk/wikis/home](https://git.location.studio/location.studio/ilpsdk/wikis/home)

## About Us

The Location Technologies group of Comtech Telecommunications Corp. is a leading provider of precise device location, mapping, public safety, and messaging solutions. Sold around the world to mobile network operators, government agencies, and Fortune 150 enterprises, our platforms allow you to locate, map, track, and message.

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